

Genoa National Fish Hatchery News and Notes



January 2015



About Genoa NFH

Genoa NFH was established over 80 years ago by the Upper Mississippi River Fish and Wildlife Act. The mission of the hatchery has changed from providing sport fish for area waters to a conservation hatchery concerned with the recovery of endangered aquatic species.

The hatchery is open for tours during business hours. For large groups, please call for an appointment. You can reach the hatchery at 608-689-2605 from 7:30 am to 3:30 pm. You can also find us online at:

fws.gov/midwest/genoa
And on Facebook at:
facebook.com/GenoaNFH



Visitor Center Construction Continues Despite Winters Deep Freeze

Construction of Genoa National Fish Hatchery's Visitor Center continued despite high temperatures of the single digits being reached in some of this winter's coldest weather. Construction crews from C3T Inc., of Milwaukee Wisconsin continued steel erection and buttoning up the building so work could continue in a somewhat controlled environment, at least compared to outside temperatures. The Visitor Center is aptly named the Great River Road Interpretive Center due to the project receiving a grant from the Department of Transportation's Scenic Byway Program. The Scenic Byway Program is a grass-roots collaborative effort established to help recognize, preserve and enhance selected roads throughout the United States. The U.S. Secretary of Transportation recognizes certain roads as All-American Roads or National Scenic Byways based on one or more archeological, cultural, historic, natural, recreational and scenic qualities, and State Highway 35 which intersect the hatchery has been selected as one of America's scenic byways. The purpose of the center will be to interpret and inform travelers of the great history of the local area, the conservation history and value of local natural resources, and local history exhibits of the area such as the Blackhawk war, in regards to its local and national significance. Timeline for completion of the building is somewhat fluid due to weather and material constraints; construction completion is still planned for the fall of 2016. Exhibit design and construction will continue into the winter with building opening tentatively scheduled for the spring of 2017. The Genoa NFH staff is excited about the new center and looks forward to the benefits it will add to our outdoor classrooms and conservation education program. By: Doug Aloisi



Workers installing insulation in the Wisconsin winter



East side protected from the winter weather

Connecting Children with Nature

Last month students from Southern Bluffs Elementary, Summit Environmental and Lincoln Middle Schools (LaCrosse WI) spent the day trading in textbooks for hands on learning at the Genoa National Fish Hatchery. The hatchery partners with Southern Bluffs, Lincoln and Summit schools to support their mission of providing students with a solid educational foundation in the core academic areas

with an environmental focus integrated throughout the curriculum. This directly correlates to the U.S. Fish and Wildlife Service's connecting children with nature initiative. Genoa collaborates directly with teaches to match activities at the hatchery with corresponding class work. Students visit the hatchery in fall, winter and spring each year as part of the outdoor classroom and Genoa staff members also visit the classroom for in class lessons. In class lessons consist of native fish identification, fish anatomy, native freshwater mussels and monarch restoration and habitat enhancement. During the first session of outdoor classroom students experience hands on learning activities based off of lessons in the classroom. In the fall students tour the hatchery and learn about the importance of aquatic resource management and the role the hatchery plays in sustaining and recovering fish and mussel populations. In winter students learn about animal tracks, furs, and experience the history and sport of trapping and importance of trapping as an effective management tool. Students also grow milkweed in the classroom over the winter months for planting on hatchery grounds in the spring. During spring session the students will have a tour of the hatchery to see how the fish have grown overwinter. This allows students to observe different species of fish and life stages from eggs through adults. The students end their day with a lesson on prairie restoration and the ecological benefits of prairies to many species of animals. In addition students plant milkweed that was grown over the winter in the classroom. Students also use quadrats to assess the amount of cover of different species of prairie grasses and possible invasive plants. This data allows the hatchery to assess its restoration practices and take action where needed. These hands on experiences trap memories and instill conservation in the minds of these future stewards of our natural resources.

By: Orey Eckes



Students make and identify different animal tracks

Genoa National Fish Hatchery's mission is to recover, restore, maintain and enhance fish and aquatic resources on a basin-wide and national level by producing over 35 aquatic species of varying life stages, participating in active conservation efforts with our partners, and becoming a positive force in the community by educating future generations on the benefits of conservation stewardship



Students learning about ethical trapping techniques

2016 Coolwater Fish Culture Meeting

Genoa National Fish Hatchery and USGS Upper Midwest Environmental Sciences Center co-hosted the 2016 Coolwater Fish Culture Workshop in Onalaska, WI, January 11th-13th. Biologists from over 15 states gathered to present information about various hatchery techniques, new equipment or studies they have been working on.



“The workshop evolved from the INTERSTATE MUSKY WORKSHOP in the late 60’s and early 70’s to COOLWATER DIET WORKSHOP in the 80’s to COOLWATER FISH CULTURE WORKSHOP in the late 90’s.” –Mike Mason, IA DNR. The meeting has been held annually, each year hosted by a different state allowing participants to tour various facilities. This rotation helps to relieve the burden of planning the annual meeting as well as enabling people from different parts of the country to attend as some states are restricting their travel. This year’s presentations included Veterinary Feed Directives, focusing on improving antibiotic use in aquaculture, culture methods for new species, recirculation systems, feed trials and new techniques for spawning coolwater fish. This exchange of information is always beneficial, many stations are culturing the same species and by changing possible techniques or procedures you can greatly increase your production and efficiency. It also helps to avoid duplication of effort and to avoid a procedure that was not very successful at another location. Participants were able to tour the Genoa NFH (in literal sub-zero temperatures!) on Tuesday night and then the USGS UMESC facility on Wednesday morning before they departed for home. UMESC and Genoa NFH were glad for the opportunity to host the meeting as a new rotation is established for future meetings. By: Angela Baran

Testing a new culture method for Mussel Culture at Genoa NFH

The technique has many names, detritus box, Hruska box, sediment tank or static tank to name a few. It is one of the preferred methods for raising the freshwater pearl mussel in Europe. Recently, other mussel culture facilities in the United States have begun using this technique for culturing species related to the freshwater pearl mussel and other species that have previously been difficult to rear in captivity. For this method, juvenile mussels are placed in a square container with a thin layer of silt. A small amount of algae is added as food and an air stone maintains adequate oxygen levels. The water and sediment in the container are exchanged weekly to prevent fouling. At each water change the mussels can be monitored and measured for growth and survival. Currently at Genoa NFH we are running one sediment box stocked with a common species, the giant floater. While growth has been slow in the lower winter temperatures in the mussel building over half of our little floaters have survived the first 6 weeks of this trial. Lessons that we have learned and will continue to learn over the duration of this winter study will help us to effectively implement this technique for some of our other difficult to culture species once spring and summer arrive.



By: Nathan Eckert

Mussel Host Test Conducted at Genoa

In an effort to further Genoa National Fish Hatchery's mussel production the staff at the hatchery is constantly looking for ways to improve methods. Some improvements may come in the form of culture facility updates and others may come in the form of simply trying new things with fish.

Production of the black sandshell at Genoa is an example of our constant efforts to get better. The black sandshell is

widely known to use walleye and sauger as hosts for their glochidia, however with the uncertainty of how pond production can go sometimes the station is stuck in a position where there are simply not enough fish for mussel production goals. Enter yellow perch. Yellow perch are also raised at Genoa NFH and we consistently produce large year classes that are not as common with walleye production. Yellow perch and walleye are closely related and are both members of the perch family; therefore it was thought that perhaps black sandshell could utilize yellow perch as a suitable host as well. In December we set up a small host test to determine if we were on to something. The glochidia from a black sandshell were used to inoculate 10 yellow perch. They were maintained in our aquarium system for two weeks while we counted the live and dead mussels that dropped off. In the end we recovered 160 live juvenile mussels. This equals 16 per fish and less than 2% transformation of all the glochidia that attached to the fish. Walleye and sauger will transform over 70% of attached glochidia and usually yield over 700 juveniles per fish. A moderate host for this species would be expected to transform at least 30%. While our results didn't provide a host to be used for hatchery mussel production we did find that the larvae could transform at some level on the yellow perch. This trial won't change future work at the hatchery, but we wouldn't know if we didn't take the time to try.

By: Aaron Von Eschen



An adult black sandshell



Yellow perch gills with mussel glochidia

Upcoming calendar of events

March 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 Warmwater Fish	2 Culture Meeting,	3 Ashland NE	4	5	6 Kids Ice Fishing Clinic
7	8	9	10 Mussel Cage Repair Day	11	12 Outdoor Classroom	13
14	15	16 Freshwater Mollusk Conservation Society Genetics Workshop National Conservation Training Center, Shepherdstown, WV	17	18	19	20
21	22	23	24	25	26	27
28	29					